

SMOKING

PSM1

THE HIGH COST OF CIGARETTE SMOKING IN GERMANY IN 2003Neubauer S¹, Welte R¹, Beiche A², Koenig HH³, Buesch K¹, Leidl R¹¹GSF-National Research Center for Environment and Health, Neuherberg, Germany, ²General Hospital Laupheim, Laupheim, Germany, ³University of Leipzig, Leipzig, Germany

OBJECTIVES: To estimate the morbidity, mortality as well as direct and indirect costs caused by active cigarette smoking in Germany in 2003. **METHODS:** We assessed the number of deaths and years of potential life lost (YPLL) in Germany in 2003 applying the concept of smoking-attributable fractions and the prevalence based approach. Using a top-down approach, smoking-attributable direct and indirect costs were calculated from a societal perspective. Direct medical costs were computed by disease and health care sector. Indirect costs include productivity losses due to work-loss days, early retirement and premature deaths which in the base case were valued by the human capital approach. **RESULTS:** A total of 121,220 people died accountable to active cigarette smoking in Germany in 2003. More than two thirds of all smoking-attributable deaths were male smokers and YPLL ran up to 1.6 million. Direct medical costs were €8 billion. Half of these costs (51%) were caused by smoking-attributable cardiovascular diseases. Neoplasms and respiratory diseases account for the rest of direct costs in almost equal shares. Perinatal diseases did not considerably contribute to this type of costs. Most of direct medical costs occur due to hospitalisation (48%). Indirect cost due to smoking-attributable morbidity and premature deaths sum up to €15 billion whereas the latter account for one third of these costs (34%). Main cost driver in indirect cost were neoplasms with €6.8 billion followed by respiratory (€4.0 billion) and cardiovascular diseases (€3.2 billion). Perinatal diseases and burn deaths did not play a substantial role. **CONCLUSIONS:** Despite several tobacco tax increases and other tobacco control measures during the last decade, smoking still induces a too high burden of disease and associated costs in Germany.

PSM2

COST-UTILITY ANALYSIS FOR SMOKING CESSATION THERAPY IN JAPANIgarashi A¹, Fukuda T¹, Oshima A², Nakamura M³, Tsutani K¹¹Tokyo University, Tokyo, Japan, ²Osaka Medical Center for Cancer and Cardiovascular Diseases, Osaka, Japan, ³Osaka Medical Center for Health Science and Promotion, Osaka, Japan

Smoking is known as a high risk factor for many types of diseases. It influences not only to the health conditions but health care expenditure by those diseases. Economic evaluation of smoking cessation programs is important to consider efficiency of intervention. **OBJECTIVES:** To evaluate cost-utility of smoking cessation therapy and nicotine-replacement therapy (NRT) in Japan. **METHODS:** We developed Markov-model to analyze lifetime costs and utility expressed in QALY gained. To identify various smoking-related diseases and Markov-transition probabilities, we organized a committee of expert physicians. With expert interview, we developed a Markov model. We only included direct medical cost from the perspective of health care payer. Efficacy of smoking cessation therapies are derived from review of RCT. We compared smoking cessation consultation and NRT with no intervention. We identified 19 smoking-related diseases, including 10 cancers based on "Health Risk Appraisal for Japanese People" developed by Nakamura and Oshima in 2000. One cycle of Markov model was set to 5 years. We

assumed hypothetical cohort who started smoking at the age of 20 and received smoking cessation therapy at the age of 40. We calculated cost and outcome until the cohort reach to the age of 90. We discounted both cost and outcome at 3% annually. **RESULTS:** We found that NRT was more effective and less costly for those who intended to stop smoking than no intervention. NRT would save direct medical costs for JPY 272,000(USD 2360) and gains 0.39 QALY compared to doing nothing. If we do not consider future cost savings from smoking related diseases and, ICER for NRT was JPY 140,000(USD 1217) per QALY gained. **CONCLUSIONS:** Smoking cessation therapy and NRT are cost effective compared to no intervention and will contribute to future cost savings. We will expand this analysis for various situation (age, sex, etc.) using this model.

URINARY/KIDNEY

PUK1

FACTORS ASSOCIATED WITH OVERACTIVE BLADDER IN MEN AND WOMEN: RESULTS FROM THE EPIC STUDYIrwin DE¹, Milsom I², Reilly K³, Hunskaar S⁴, Kopp Z³, Herschorn S⁵, Coyne KS⁶, Kelleher C⁷, Artibani W⁸, Hampel C⁹, Abrams P¹⁰¹University of North Carolina, North Carolina, NC, USA, ²Sahlgrenska Academy at Goteborg University, Göteborg, Sweden, ³Pfizer, Inc, New York, NY, USA, ⁴University of Bergen, Bergen, Norway, ⁵University of Toronto, Toronto, ON, Canada, ⁶United BioSource Corporation, Bethesda, MD, USA, ⁷St Thomas' Hospital, London, UK, ⁸University of Padova, Padova, Italy, ⁹Johannes-Gutenberg-Universität, Mainz, Germany, ¹⁰Southmead Hospital, Bristol Urological Institute, Bristol, UK

OBJECTIVE: To evaluate comorbidities associated with overactive bladder (OAB). **METHODS:** A population-based telephone prevalence survey was conducted among adults ≥18 years of age in Sweden, Italy, Germany, the UK, and Canada. A nested case-control analysis was performed on data collected from participants with OAB (cases; n = 1503) and without OAB (controls; n = 3076), applying the current International Continence Society definitions. Survey participants were asked to report a history of chronic constipation or diagnoses of the following: asthma, diabetes, hypertension (HTN), bladder or prostate cancer, neurologic conditions (multiple sclerosis, stroke, or Parkinson's disease), or depression. Respondents noted diuretic use and for women, parity. Prevalence odds ratios (PORs) and 95% confidence intervals (CIs) were calculated using logistic regression models for men and women. **RESULTS:** Several comorbidities were significantly associated with reported OAB. In men, these included neurologic conditions (POR = 2.7; 95% CI = 1.3–5.7), depression (POR = 2.5; 95% CI = 1.6–3.7), chronic constipation (POR = 2.2; 95% CI = 1.1–4.1), and bladder/prostate cancer (POR = 2.1; 95% CI = 1.1–3.9), after controlling for age, diuretic use, asthma, HTN, and diabetes. In women, these included neurologic conditions (POR = 2.7; 95% CI = 1.5–4.7), chronic constipation (POR = 2.1; 95% CI = 1.4–3.2), depression (POR = 1.7; 95% CI = 1.3–2.3), diabetes (POR = 1.5; 95% CI = 1.1–2.2), and HTN (POR = 1.3; 95% CI = 1.1–1.6), after controlling for age, diuretic use, asthma, and parity. Body mass index and smoking did not add any precision to the model; the 95% CIs for these conditions encompassed 1.0. **CONCLUSIONS:** Several common chronic health conditions were significantly more prevalent among participants with reported OAB. Chronic constipation, neurologic conditions, and depression were significantly associated with OAB in both men and women, even after adjusting for important covariates such as age, diuretic use, and other comorbidities. Further research is needed to examine these associations as potential risk factors for OAB.